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ABSTRACT

After many years of attention to input that supplies classroom second language (L2) learners with positive evidence on L2 forms and features, recent studies have begun to identify and describe the negative evidence in "reactive" input, provided through interlocutor responses to forms and features that are used by learners, but are not consistent with the L2 they are learning. The following study was undertaken to compare the negative evidence in responses to learners in two types of classrooms, one content-based, the other grammar-based. Data were collected on teacher and peer responses to learners non-target production during six discussions about cultures and six exercises in sentence construction. Results of the study revealed teacher, rather than peer response as the principle sources of negative evidence in both classroom types. The differences in negative evidence in the two classroom types appeared to be an outcome of the expectations and goals of the discussion and sentence construction activities, and also suggested ways in which these activities might be adjusted or enhanced to provide learners with negative evidence through the addition of interactive tasks. (Contains 35 references.) (KFT)

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Teacher and Peer Responses as a Source of Negative Evidence to L2 Learners in Content-Based and Grammar-Based Classroom Activities

ED 452 701

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After many years of attention to input that supplies classroom second language (L2) learners with positive evidence on L2 forms and features, recent studies have begun to identify and describe the negative evidence in "reactive" input, provided through interlocutor responses to forms and features that are used by learners, but are not consistent with the L2 they are learning. The following study was undertaken to compare the negative evidence in responses to learners in two types of classrooms, one content-based, the other, grammar-based. Data were collected on teacher and peer responses to learners' non-target productions during six discussions about culture and six exercises in sentence construction, as these were the predominant activities in the two classroom types.

Results of the study revealed teacher, rather than peer, responses as the principal source of negative evidence in both classroom types. In the responses of content-based discussions, there was a low incidence of what was primarily, implicit negative evidence, despite a relatively high proportion of learner non-target utterances. This was because most of the non-target utterances were produced in meaningful, multi-utterance texts, which could be understood with minimal intervention by teachers or peers. In comparison, the grammar-based sentence construction exercises revealed a higher incidence of teacher intervention and negative evidence. These were located in responses to learners' single utterance, short answers to teacher questions and prompts. Implicit negative evidence also predominated, but there was a significant proportion of explicit negative evidence as well.

The differences in negative evidence in the two classroom types appeared to be an outcome of the expectations and goals of the discussion and sentence construction activities, and also suggested ways in which these activities might be adjusted, or enhanced, to provide learners with negative evidence through the addition of interactive tasks.

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Input and Evidence in Second Language Learning

That second language (L2) learners need input for their learning is fundamental to second language acquisition theory and language pedagogy. Research over the past two decades has addressed questions about the exact form and content of the input that learners need, and its degrees of frequency and timing in the learning process. (See Ellis 1994; Gass & Selinker 1994; Lightbown & Spada 1999; Long 1996; Pica 1994, and Swain 1995 for syntheses of this work). More recently, new questions have emerged about the input needed by second language (L2) learners. These have focused on the evidence they require about the forms and features of the L2 they are learning.

Long has addressed these questions in terms of the positive and negative evidence available in input. By drawing from first language learning theory and research (including Farrar 1990, 1992; Nelson 1977; and Pinker 1989, for example) and from studies of L2 classroom intervention (such as those of Spada & Lightbown 1993; White 1991; and White, Spada, Lightbown & Ranta 1991), he distinguished between input that provides positive evidence of forms and features that comply with those of the L2, and input that supplies negative evidence on forms and features that are used by learners, but are not consistent with the L2 they are learning. (For a comprehensive review, see Long 1996).

Both positive and negative evidence can be made available through formal rule instruction, grammar texts, and other related resources. However, one of the most effective ways in which evidence can be revealed to learners is through what Long called 'reactive' input, provided through interlocutor responses to learner imprecisions within the context of meaningful interaction. This is particularly the case for negative evidence. In situating their questions and examining their findings within this perspective, Long and other researchers have both underscored the importance of input that offers positive L2 evidence, and shed light on the contributions of 'reactive' input that supplies negative evidence to the learning process. (See for example, a review article by Spada 1997, and research of Doughty & Varela 1998; Lightbown 1993; Lightbown & Spada 1997; Long, Inagaki, & Ortega 1998; Long & Robinson 1998; Lyster 1998; Lyster & Ranta 1997; Mackey & Philp 1998; Oliver 1995; and again, Spada & Lightbown 1993; White 1991; and White, Spada, Lightbown & Ranta 1991).

This small sample represents a larger pool of studies whose findings have shed light on the diversity of evidence available in input to learners and on the expanded role of responses to learners as a vehicle for such input. They further illustrate the role of meaningful interaction in the learning process, and suggest the need to examine the classroom environment in such terms. The following section will review the distinguishing characteristics of positive and negative evidence that have been identified and described in these studies, and will illustrate how this work has motivated the present investigation into classroom responses to learners as sources of negative evidence.

Positive and Negative Evidence

According to Long, positive L2 evidence is found in utterances and texts available in input to learners during their interaction with interlocutors. As illustrated in Figure 1, these samples of input can occur in their authentic, unaltered state, as in (1a), or they can be modified when they cannot be understood by the learner, as illustrated in (1a) - (1e). As shown in underlined form, individual target productions of words or phrases might be extracted by interlocutors from their original utterances, and provided in follow up utterances either in isolation, as in (1b) or embedded in longer units, as in (1c). Words and phrases might be repeated, or rephrased, with pronoun substitutions, and definitions and examples added to them, as shown in underlined bold in (1c) - (1f).

Figure 1

English L2 Learner	NS English Interlocutor
When is the class?	(1a) The class begins at two
I don't understand	(1b) at two
	(1c) About the class, it begins at two.
	(1d) It begins at two.
	(1e) It begins **exactly** at two o'clock.
	(1f) Ah the class on film begins at 2.

These kinds of adjustments not only assist learners in their comprehension of L2 input, but also allow them additional, more focused, opportunities to attend to L2 forms which encode meanings and functions in the input. (See also Pica 1994). Together, authentic and modified input are believed to provide much of the positive, linguistic evidence needed for L2 learning. Yet, as Long (1996) has pointed out, such input is an insufficient source of evidence for learners. First, learners may not notice L2 forms and features that are difficult, complex, or highly similar to their L1, even when they are encoded in modified input. Secondly, they might not notice the difference between target versions of L2 forms and features in the input and their own erroneous interlanguage versions of them. This is especially the case if they have internalized inaccurate versions of L2 forms and features, especially those that are functionally adequate for communicative purposes. (See also Doughty & Williams 1998 and Schmidt 1990).

To help learners access, and eventually internalize, target versions of L2 forms, negative evidence about what is NOT in the L2 can be especially useful. Such evidence can help learners notice differences between developmental features of their interlanguage and target features of the L2 (See again, Schmidt 1990 for data and discussion). Negative evidence can keep learners from stabilizing erroneous, developmental forms and features in their interlanguage, or can help them destabilize errors should such a point of stabilization have already occurred.

That negative evidence can be provided through formal instruction and corrective feedback has long been documented in classroom studies (See

research and review of research in Chaudron 1977 and 1988). What is remarkable, however, as illustrated in Long's construct of "reactive input," is its abundance in responses to learners during conversational interaction. Examples of such responses are provided below, in Figure 2.

As shown in italics in Figure 2, items (2a) - (2f), conversational responses can offer learners implicit negative evidence through statements and questions regarding the responder's need for message comprehensibility, clarification, and confirmation. Often, target L2 versions of errorful words and phrases are included, as is the case for begins in (2d) - (2f). Researchers have referred to such responses as signals for the negotiation of meaning (See Long 1985, 1996; Gass & Varonis 1989, 1994; and Pica 1988, 1994) and signals for the negotiation of form (See Lyster 1998, and Lyster & Ranta 1997).

Other responses, such as (2g) and (2h), expand or recast erroneous utterances, replacing them with L2 versions. They, too, offer implicit negative evidence, alerting learners subtly to imprecisions in the meaning of their messages, as they recode erroneous forms within them. As such, they function quite differently from the responses of (2i) - (2k), which also recode erroneous forms, but do so through explicit correction and instructional, metalinguistic input.

Figure 2

English L2 Learner	NNS English Interlocutor
The class begin on two.	(2a) I didn't understand
	(2b) What did you say?
	(2c) What's the class?
	(2d) The class *begins* when?
	(2e) It *begins* when?
	(2f) It *begins at* what time?
	(2g) Ah the class on film *begins at* two
	(2h) The class *begins at two*
	(2i) *You need to say that* the class *begins at* two
	(2j) *You need to add -s to begin*
	(2k) *Class is singular. So you need to make begin agree with it*

As the above examples illustrate, negative evidence about L2 form and meaning can be made available to L2 learners across a range of functionally diverse responses, with varying degrees of explicitness. Whether such availability and variation are also apparent in the classroom was the focus of the following study. This study aimed to describe and compare responses of negative evidence in two types of classrooms — those whose underlying curriculum, materials, and activities emphasized L2 communication and academic content and those which emphasized the application of rules and formal accuracy. Specific concerns focused on similarities and differences in the classrooms with respect to the extent to which negative evidence was offered in responses to learners' non-target productions; was provided by teachers or peers; and was encoded in an implicit or explicit manner.

These concerns were heightened by the current post method period of L2

teaching, in which teachers, curriculum planners, and other language educators might choose from a range of pedagogical options in guiding the acquisition of L2 form and function. (See discussion in Kumaravadivelu 1994 and Pica 2000). A further influence was the tendency toward offering specialized and elective courses, particularly at the university level. Such specialization suggested that negative evidence may be represented very differently to learners, depending on the types of classes they take.

In its focus on the incidence and features of negative evidence across two different types of classroom contexts, the study was also informed by the growing body of research that has connected negative evidence, classroom tasks, and learning outcomes. (See, for example, Doughty and Varela 1998; Lightbown and Spada 1990; Lyster 1998; Lyster and Ranta 1997; Oliver 1995, 2000). This made it essential to identify specific classroom activities within each context as a basis for analysis. These methodological matters are discussed in the following section, which includes a description of the classroom contexts, participants, and classroom activities of the study.

Method

Classroom Contexts

Data for the two types of classroom contexts were gathered in an intensive, university based English language institute. The classes, which were drawn from courses in content and grammar, met in one to two hour blocks of time four to five times a week, over a seven week period.

Six content-based class meetings were studied. Three of the classes focused on literature and culture, as students read and responded to American English literary texts. The other three classes focused on film and American culture, and used tapes of recent U.S. movies as its a basis for its content. Their primary objective was to promote the learning of English L2 and knowledge about American cultures. Each content-based class had access to a detailed curriculum guide, which was the outcome of efforts among curriculum developers, various course instructors, and language institute directors. Both the literature and film curricula emphasized a range of interactional activities among teachers and students, including class discussion, dialogue journals, student group work, at home projects and reading, and in-class presentation. Grammar lessons were provided as the teachers deemed necessary, both in class, and in feedback on homework assignments.

Six grammar-based class meetings were also studied. Four of the classes were at an intermediate level, and two were at an advanced level. Both held as their primary objective the understanding, application, and development of rules and structures of English grammar. Each class had access to a detailed curriculum guide, which emphasized interaction among teachers and students, using grammar in meaningful contexts, and homework preparation for

class activities.

Participants

There were three content based and three grammar-based teachers, all with relevant professional training and experience, ranging from exceptional to appropriate and sufficient. Two of the content-based teachers and two of the grammar-based teachers had specific training and education in applied linguistics and experience with the curriculum they were teaching. The other two teachers were less experienced, but considered highly qualified to teach their respective areas.

The students were at advanced and high intermediate levels of English L2 development. In the literature class, a wide range of Asian and European L1 backgrounds and ethnicities was represented. Students in the film and grammar classes were predominantly of Asian L1 backgrounds and ethnicities. There were ten to fifteen students per class.

Results of placement and proficiency tests, as well as reports and observations of teachers and program administrators, revealed an overall level of communicative proficiency for students consistent with their level placements. Despite their overall level of communicative proficiency, however, the students also revealed grammatical imprecisions and inconsistencies in their expression of reference, modality, and information structure, as seen in their article over-, and under-suppliance, inappropriate verb tense and aspect marking, and modal mis-selection. Some of these imprecisions were addressed explicitly in the grammar courses. In the content-based courses, these features were not emphasized directly in the curricula, but were believed to be widely available in oral and written classroom input and could be addressed in individual classes if deemed necessary by the individual teacher.

Data Collection

Data collection was carried out through audio and video taping. In the content-based classes, data were collected during teacher-directed discussions of literary texts and film, which were based on preparation through homework reading assignments, previewing, and re-viewing. The activities used to gather data on the grammar-based classes were teacher-led sentence construction exercises, often based on homework as well. They varied from half to three-fourths of each class meeting time, as other portions of class time were used for classroom management and, in the case of the content-based classes, periodic text re-reading or film re-viewing to support opinions and answers. Both activities were chosen as primary units for data collection and analysis because of their frequency of occurrence, uniformity of interactional structure, and repeated use in the classrooms under study, as revealed during several months of prior classroom observation.

The discussion activity focused on exchange of information, opinions and cultural insights into the text or film content. These were chosen at random

from a sample of more than thirty such activities, each initiated through framing utterances such as, "I'd like to talk about..." or "Let's go on to... ." This framing utterance served as the initial boundary for the activity. The final boundary was marked either by the end of the class meeting or a teacher utterance such as, "OK, let's move on to..."

The sentence construction exercises required student application of specific grammar structures to prompts from the teacher or text. The purpose of this activity was to create what were considered correct sentences by filling in the blanks in sentence exercises, responding to a stimulus picture or text, or forming sentences by type. These activities were identified not only by these features, but also in the ways they were introduced by the teachers through structuring remarks such as "Your assignment for today was to...," "let's go over those," or "Let me just play a little game for a minute..." "So I want to practice..."

Data Coding and Analysis

All data from the discussion and exercise activities were first coded for teacher and student utterances. Random samples of the data were coded by the researcher and trained coders, each with backgrounds in applied linguistics. Inter-item reliability was .98 for utterances, and ranged between .80 and .99, for features of negative evidence and other features, whose operationalization, coding, and computing appear in the list which follows.

1. Learner non-target productions: These were student-produced utterances that did not conform to target relationships of L2 form, function, and meaning. Computations were made of their frequency and proportion to the total frequency of learner utterances.

2. Teacher and Peer responses that followed learner non-target productions. These were utterances that followed immediately after learner non-target utterances. Computations were made of their frequency and proportion to the total frequency of learner non-target utterances. A breakdown appears in 2a-c, below.

2a. Teacher and Peer response utterances that supplied implicit negative evidence through indirect reference to non target form-meaning relationships in the learner utterances that preceded them. Included in this category were the following:

2a1. Negotiation signals: Responses that indicated difficulty with clarity, comprehensibility and completeness of a non-target utterance, and/or requested clarification or confirmation thereof.

2a2. Recasts: Responses that recast a non-target utterance, simultaneously modifying one or more non-target features, but preserving message meaning.

2b. Teacher and Peer response utterances that supplied explicit negative evidence through direct reference to non target form-meaning relationships in the learner utterances that preceded them. Included in this category were utterances that filled the following functions:

2b1. Responses of corrective feedback through a correct version of all or part of a non-target utterance.

2b2. Responses of rejection or negative evaluation that indicated that a non-target utterance was incorrect or not quite right or that learner should try again.

2b3. Responses that supplied metalinguistic information/explanation, applied for example, to a description and/or explanation for a non-target utterance.

2c. Other response utterances from teachers and peers, including utterances of back channeling, topic continuation/switch, agreement, and approval.

3. Contexts for response utterances that followed learner non-target utterances, but for which no response was offered, i.e., contexts in which the learner produced a non-target utterance and continued speaking.

The following are illustrations of the coding, many of which have been drawn from the utterances shown in Figure (2) above:

Figure 3

Learner Non-Target Utterance	Types of Utterances of Response with Negative Evidence		Examples
The class begin on two	2a	**Implicit Negative Evidence:**	
	2a1.	Negotiation Signals	
		Signal Indicating Lack of Comprehension	I don't follow
		Clarification Seeking Signal	The class begins when
		Confirmation Seeking Signal	The class begins at two?
	2a2.	Recast	The class begins at two
	2b.	**Explicit Negative Evidence:**	
	2b1.	Corrective Feedback Utterance(s)	You need to say that the class begins at two
	2b2.	Rejection/Negative Evaluation Utterance(s)	You said that incorrectly
	2b3.	Utterances with Suppliance of Metalinguistic Information/Explanation	Class is singular. So you need to make begin agree with it
	2c.	**Other utterances of Response:**	
		Back Channel	uh huh
		Topic Continuation/ Switch	So what are you doing after class?
		Agreement	Yes, I know that
		Approval	It's kind of you to let me know
The class begin on two	3.	**No Response**	ø
The class end at four. After that I study			ø

Results

Analysis of the data revealed both similarities and differences in the negative evidence offered to learners in the content-based and grammar-based activities. The extent of the negative evidence in responses to learners' non-target productions was found to be significantly greater during the grammar-based exercises than the content-based discussion. However, the pattern of suppliance of negative evidence was essentially the same, as negative evidence was supplied more consistently in responses to students' single utterance productions than their multi utterance contributions. This pattern was more readily obtained in the sentence construction activities of the grammar-based classroom than the opinion and reflection oriented discussions of the content-based classroom. Implicit negative evidence prevailed in both types of classroom activities. However, there was a significantly greater proportion of explicit to implicit negative evidence in the grammar-based classroom. Teacher responses were shown to be a significantly more consistent source of negative evidence to learners than their peers. As such, they provided implicit negative evidence in the form of signals and requests for comprehensibility and clarification. These results are further described and analyzed below.

Extent of Negative Evidence

As shown in Table 1, negative evidence was available in 79, or 29 percent of the response utterances to students' non-target productions during content-based discussion. This figure was significantly higher in the grammar-based exercises, where 145 or 70 percent of response utterances offered negative evidence. ($X2 = 79.86$, d.f.=1, $p < .05$). In both classroom types, the remaining, "other" responses to students' non-target productions did not provide negative evidence, but were encoded as backchannels, acknowledgments to comments, follow-up questions, and topic continuation moves.

Table 1
Frequency and Proportion of Utterances with Negative Evidence in Response to Learners' Non-Target Utterances

	Content-Based Discussion		Grammar-Based Exercises		Totals	
	n	% Response Utterances	n	% Response Utterances	n	% Response Utterances
Response Utterances with Negative Evidence	79	29%	145	70%	224	47%
Other Response Utterances	189	71%	61	30%	250	53%
Total Response	268		206		474	

Utterances

There were many more student non-target utterances than there were responses of any kind in the content-based discussions. Thus, as shown in Table 2, of the 483 non-target utterances that the students produced during content based discussion, only 268, or 55 percent of them, were followed by one or more response utterances, whereas 215, or 45 percent, received no response utterances at all. On the other hand, during sentence construction, 206, or 95 percent, of students' non-target utterances were followed by one or more response utterances. These differences were significant ($X^2 = 108.37$, d.f. = 1, $p<.05$). Together with the data on "other" responses from Table 1, these findings indicated that the students received a modest amount of negative evidence on their L2 non-target production during content-based discussion and a substantial, consistent amount during grammar-based sentence construction.

Table 2
Frequency and Proportion of L2 Learner Non-Target Utterances with and without following Response Utterances

	Content-Based Discussion		Grammar-Based Exercises		Totals	
	n	% Response Utterances	N	% Response Utterances	n	% Response Utterances
Learner Non-Target Utterances Followed by One or More Response Utterances	268	55%	206	95%	474	68%
Learner Non-Target Utterances Followed by No Response Utterances	215	45%	11	5%	226	32%
Total Learner Non-Target Utterances	483		217		700	

Patterns of Suppliance of Negative Evidence

The patterns of suppliance of negative evidence were essentially the same in the content-based discussion and the grammar-based sentence construction, in that negative evidence was supplied more consistently immediately after students' single utterance answers than during their multi utterance contributions. The grammar-based exercises were far more conducive than the content-based discussion to single utterance contributions in that students were asked to provide short answers to sentence starters and prompts. In the content based discussion, on the other hand, they were asked to summarize stories, describe characters, and share opinions and ideas.

This contrast can be seen in Excerpts (1) and (2) as compared with Excerpt (3), below. The student's response to a teacher question in a sentence completion task in Excerpt (1) and the student's completion of a teacher elicitation in Excerpt (2), generated immediate, recast responses by the teacher. The teacher request for a "thumbnail sketch" about the movie, "Stand and Deliver." in Excerpt (3) led to fluent reflections on the part of the student. The teacher responded with backchannelling, agreement, and approval. In so doing, the teacher's responses focused on message meaning, but overlooked inconsistencies in agreement, tense marking, and noun phrase morphology in the student's contributions.

Excerpt 1

Teacher	**Student**
	ah, I wrote it
you read it?	the title in Polish is different
(Grammar-based exercise)	

Excerpt 2

Teacher	**Student**
there's another conflict in the mother. something else is- the mother is thinking a lot about *going back to China is one thing*	go back China
(Content-based discussion)	

Excerpt 3

Teacher	**Student**
give me a thumbnail— give me a thumbnail sketch	
aah uh-huh, uh-huh	the second one is, eh, the teacher give him, gives him enough time and encouraged him like Patricia said, the teacher give him enough uh
ah	space to let him to feel he can do good that's the most important two points for him and also he pay more attention to uh I mean the teacher pay more attention to Angel — he's one of a closest students of him and he he, the teacher prevents the fighting between Angel and other students that
yeah yeah	xxx teacher if they would ask question he would give ninety nine percent point
yeah yeah, that's right that's right	
(Content-based discussion)	

As shown in Table 3, response utterances of negative evidence were much more likely when learner non-target utterances occurred in single, independent contributions of learners. Thus, in the grammar-based exercises, which by design, promoted production of single utterance sentence completions, 89 percent of the responses of negative evidence occurred in relation to single independent utterance contributions of students.

In content-based discussions, 66 percent of responses with negative evidence occurred when learners made single utterance contributions. Only 18 percent of such responses occurred in the middle of a student contribution of two or more utterances, and only 16 percent occurred at the end of a student contribution of two or more utterances. As illustrated in boldface, in Excerpt 4, which follows Table 3, the response to a student's meaningful, but grammatically non-target, text in the content class was more typically a topic related move than a message that offered negative evidence.

Table 3
Frequency and Distribution of Response Utterances with Negative Evidence to Learner Non-Target Utterances in Relation to Discourse Context in Content-Based vs. Grammar-Based Classrooms

	Content-Based Discussion		Grammar-Based Exercises		Totals
Context of Learner Non-Target Utterance	n Response Utterances with Negative Evidence	% Response Utterances with Negative Evidence	n Response Utterances with Negative Evidence	% Response Utterances with Negative Evidence	n Response Utterances with Negative Evidence
Independent Utterance	52	66%	129	89%	181
Text Initial / Medial Utterance	14	18%	9	6%	23
Text Final Utterance	13	16%	7	5%	20
Totals	79		145		224

Excerpt 4

Teacher	Student
	the daughter have a pretty good but she also hope to get married but she think about her mother. so they are worried__ each other you know so they pretend they think they really have a good life
mm-hmm	at that time
mm-hmm	but when the her mother go to China back and her mother change change his un thinking and being and then
	uh her daughter think that then she can get married and her mother can *indepen*d on others
really? I had a very different point of view	

(Content-based discussion)

Just as the larger, discourse pattern which extended across utterances revealed a pattern in responses with negative evidence, a pattern was also evident within utterances. Within content-based discussion there was a tendency toward more frequent suppliance of negative evidence in responses that followed learner utterances with only one non-target feature compared to those with two or more non-target features. As shown in Table 4, of the 79 total response utterances with negative evidence to learners' non-target productions, 61 percent were provided to utterances which had one non-target feature, and 39 percent were provided to utterances of two or more non-target features. This difference was significant ($X2 = 34.60$, d.f. = 1, $p<.05$).

Table 4
Frequency and Distribution of Response Utterances with Negative Evidence in Relation to Number of Non-Target Features in Learner Utterances in Content-based Discussion

	Learner Non-Target Utterances with 1 Non-Target Feature		Learner Non-Target Utterances with 2+ Non-Target Features		Totals
	n	%	N	%	n
Response Utterances with Negative Evidence	48	61%	31	39%	79
Other Response Utterances	124	66%	65	34%	189
Total Response Utterances	172	64%	96	36%	268

Features of Negative Evidence: Implicitness vs. Explicitness:

Table 5 provides a breakdown of findings on implicit and explicit negative evidence with respect to students' non-target L2 productions. There was a far greater proportion of implicit to explicit negative evidence in both classrooms. As shown in Table 5, there were 68 response utterances that provided implicit negative evidence during discussion, and 118 such utterances during the grammar-based exercises. These figures constituted a respective 86 and 81 percent of the total number of utterances with negative evidence. Explicit negative evidence constituted 14 percent of the utterances with negative evidence in discussion and 19 percent in the exercises. No significant difference in the distribution of implicit to explicit evidence in the two types of activities was found. ($X2 = .50$, $df = 1$, $p > .05$). Thus implicit negative evidence was the predominant way to encode responses to students' non-target productions.

Table 5
Frequencies and Proportions of Implicit and Explicit Negative Evidence in Responses to L2 Learners' Non-Target Utterances

	Content-Based Discussion		Grammar-Based Exercises		Totals	
	n	% Response	n	% Response	n	% Response
Non-Target L2 Productions						
Response Utterances with Implicit Negative Evidence	68	86%	118	81%	186	83%
Response Utterances with Explicit Negative Evidence	11	14%	27	19%	38	17%
Total	79	35%	145	65%	224	100%

Implicit negative evidence was supplied primarily through signals of lack of comprehension and confirmation seeking signals. This is illustrated in italics in excerpts (5) and (6), below:

Excerpt 5

Teacher	**Student**
What do you think about this story? Is there anything interesting for you?	Yes. I want to tell something... I think uh in this club in the playing clubs reflects uh human life is a because
ok I didn't quite understand the what, the plain clothes?	playing club, club, club
club?	yeah
club?	in this club
OK	
(Content-based discussion)	

Excerpt 6

Teacher	**Student**
	my mansion is more (concrete) than the horse
huh? Complete?	
(Grammar-based exercise)	

Recasts were found in responses in both types of activities, as shown in italics in excerpts (7) through (9) below. Most of the recasts included repetition or segmentation of student utterances. For example, in (8) and (9) the teacher segments "phase of life" and "expensive," then recasts them with the grammatical features consistent with the student's target. Excerpt (7), however, is recast as an expansion of the student's utterance, as the teacher embeds the student's utterance in a complex clausal construction.

Excerpt 7

Teacher	**Student**
	tells him your mother back soon
OK, yeah. he tells him that, uh, his mother will be back soon	
(Content-based discussion)	

Excerpt 8

Teacher	**Student**
	it seems to me like the story about the phase of life or
mm-hm. *it could be in "Phases of Life."*	
(Content-based discussion)	

Excerpt 9

Teacher	Student
	my mansion is expensive...than your camera
more expensive	

(Grammar-based exercise)

Explicit negative evidence, supplied through corrective feedback, explicit rejection, negative evaluation, and metalinguistic information is shown in italics in excerpts (10) and (11), as the teacher provides information about correct L2 use.

Excerpt 10

Teacher	Students
wh-wh-that's the right meaning but what's the right word? anybody know?	the something was too slow
and its re eh?	(process)
it starts with P that's good	
we're getting there	
yeah one that equals 'steps.'	
anybody?	to talk about the point? point
no, huh-uh	pace
got it? OK	yes

(Content-based discussion)

Excerpt 11

Teacher	Student
	report
reported on, or you could have since it's recent, has reported	

(Grammar-based exercise)

Finally, the grammar-based exercises also revealed a distinctive utterance response of re-elicitation, which was not found during content discussion, whereby students were given prompts to encourage completion of their messages. Twelve such utterances were found in the data. Although this type of response had not been considered as a coding category the original framework for the study, it appeared to serve as a implicit form of negative evidence. An example from the data is shown in excerpt (12) below:

Excerpt 12

Teacher	Student
	what did he wrote?
what did he...	write
	what, what wrote Cervantes?
what	what did Cervantes write?
(Grammar-based exercise)	

Teachers and Peers as Sources of Negative Evidence:

As revealed in Table 6, negative evidence to students' non-target productions was provided in a far greater amount from teachers than peers. As shown in Table 6, teachers supplied 78 of the 79 response utterances with negative evidence during the content-based discussion, and 87% of such utterances during grammar-based exercises. The pattern of teacher dominance held for all "other" responses to students' non-target productions as well, although peer responses were more apparent in this category, constituting 12 percent of the total responses in the content-based discussions and 7 percent in the grammar exercises. Thus, in the content-based classroom, peers responded to their classmates' non-target utterances, but did not to do so with negative evidence. In the grammar-based classroom, where suppliance of appropriate forms was the focus of the exercise, peers did so more readily, although still not to the same degree as the teacher.

These results are very likely related to the teacher-led design and implementation of both activities of the study. They also suggest that peers may not have perceived themselves as helpful or necessary as a source of negative evidence for the two activities. In open ended discussions, there is great latitude and redundancy in what needs to be said or understood. Transmission of negative evidence on formal inconsistencies is required only insofar as it interferes with message meaning. Given the expectations of preparation and familiarity of the students with film and story content prior to their discussion, it is likely that only with respect to the content itself would they seek clarification. For the sentence construction, the rates of student suppliance of negative evidence are higher. However, despite encouragement to focus on form, they might have believed that the kinds of formal precision required were best monitored by the their teachers' knowledge and training rather than their own evolving proficiency in this area.

Table 6
Frequencies and Distribution of Teacher and Peer Response Utterances to Student Non-target Utterances

	n	% Response Utterances with Negative Evidence	% Total Response Utterances	n	% Response Utterances with Negative Evidence	% Total Response Utterances
Response Utterances with Negative Evidence						
Teacher	78	99%	30%	124	87%	61%
Peer	1	1%	0%	21	13%	10%
Response Utterances with Implicit Negative Evidence on Non-Target Form-Meaning Relationships						
Teacher	67	85%	25%	100	69%	49%
Peer	1	1%	1%	18	12%	9%
Response Utterances with Explicit Negative Evidence on Non-Target Form-Meaning Relationships						
Teacher	11	14%	4%	24	17%	2%
Peer	0	0%	0%	3	2%	1%
Response Utterances with backchannel, topic acceptance, topic continuation, topic switch						
Teacher	157		59%	46		22%
Peer	32		12%	15		7%
Total Response Utterances	268		100%	206		100%
Teacher	235		88%	170		82%
Peer	33		12%	36		18%

Summary, Conclusions, and Implications

The questions and concerns of this study are situated within a long standing line of research on input to learners as a source of linguistic data for L2 learning. Most of this research has been centered on the ways in which input can be modified to promote message comprehensibility and provide positive evidence of L2 forms and features. In recent years, input research has also considered the ways in which interlocutor responses can serve as data for L2 learning. Of interest have been responses that draw learners' attention to their imprecisions, and provide negative evidence of inconsistencies between forms and features in their production and target versions in the L2. Experimental, conversational, and classroom contexts have revealed a variety of possible encodings, ranging from explicit expressions of evaluation and correction to implicit feedback through recasts, clarification requests, and confirmation checks.

In light of the diversity of interactional contexts in which negative evidence has been shown to occur, and the variety of ways in which it can be encoded, the present study compared its availability and encodings during interactive activities in two types of classrooms, one whose curricula emphasized communication of subject matter content, and the other, practice of grammatical features and rules. Data were collected during teacher-led discussion and sentence building exercises, as these had been shown to be the most typical activities in the respective classroom types.

Results of the study revealed that negative evidence was available in both types of activities. However, the grammar-based sentence construction activity showed far closer consistency between students' imprecisions and responses of negative evidence than the content-based discussion. During content-based discussion, less than a third of the responses offered negative evidence. Instead, many student contributions, though filled with grammatical imprecisions, received responses of backchannelling, agreement, and acknowledgment as to their content appropriateness. Nearly fifty percent were not given any response at all. In contrast, over two thirds of the responses in the grammar-based sentence construction contained negative evidence, and only six percent did not receive a response. Despite these differences in the extent to which negative evidence was available, however, three similarities were found in both activity types. First, most of the negative evidence was provided after learner misproductions that were one utterance long. Secondly, negative evidence was offered in teacher, rather than peer, responses. Finally, most of the negative evidence was implicit in its encoding.

These three features comply with interactional options available in most classrooms, and suggest that it is possible for learners to be provided with negative evidence across a range of activities, whether they are as open-ended as discussion, which generates lengthy opinions, or close-ended as grammar exercises, which require specific answers. These activities, however, posed concerns with respect to their restrictions on either response data to students or out-

put production by them. First, based on the number of non-target productions, it is troubling that there were so many misproductions during discussion that were followed by responses of backchannelling, acknowledgment, or agreement, or no response at all. Additionally problematic was that the predominant context for suppliance of negative evidence in both activities was the limited, utterance-level production of the students. In other words, the activities, as implemented, either restricted responses with negative evidence for the sake of learner output or limited production of output for the sake of responses. At the very least, this pattern suggests the need to encourage inclusion of both kinds of activities in class, since students will receive different kinds of feedback in the different output conditions.

In addition, these observations suggested consideration of ways in which the activities might be modified or augmented to promote responses of negative evidence to students' misproductions. One way to do this would be for interlocutors to respond to students' imprecisions with implicit negative evidence throughout their lengthy text productions. It might be possible, for example, to add onto or substitute the backchannelling, acknowledgment, and other responses found in the background of the lengthy texts of Excerpts (3) and (4) with other, unobtrusive moves which supply negative evidence. Such a possibility is shown below as the original excerpts have been kept intact, with backchannels and comments used as insertion points for responses of negative evidence, here encoded implicitly, as recasts and negotiation signals, in bold. In keeping with results of the study, there is also an attempt to recast utterances or clauses with respect to utterances with one non-target feature.

Excerpt (3a)

Teacher	Student
give me a thumbnail—give me a thumbnail sketch	
aah uh-huh, uh-huh	the second one is, eh, the teacher give him, gives him enough time and encouraged him like Patricia said, the teacher give him enough uh
ah **yes she gave him enough what?**	space to let him to feel he can do good that's the most important two points for him and he pay more attention to uh I mean the teacher pay more attention to Angel – he's one of a closest students of him and he he, the teacher prevents the fighting between Angel and other students that xxx
yeah yeah **he was one of the closest** students to him yeah yeah, that's right that's right if **they would ask questions he would give ninety nine points**	teacher if they would ask question he would give ninety nine percent point

(Content-based discussion)

Excerpt (4a)

Teacher	Student
	the daughter have a pretty good but she also hope to get married but she think about her mother. So they are worried__each other you know so they pretend they think they really have a good life
mm-hmm **yes they are worried about each other**	at that time
mm—hmm	but when the her mother go to China back and her mother change change his un thinking and being and then uh her daughter think that then she can get married and her mother can independ on others
really? I had a very different point of view **about when her mother went back to China** **OR** really? I had a very different point of view about it. **You think she wants her mother to depend on Others, so she can get married?**	
(Content-based Discussion)	

Similarly, during sentence construction, it might be possible to encourage text production in an area of prior imprecision, including additional negative evidence moves as follow up. Excerpt (1) is repeated, but embellished in bold.

Excerpt (1a)

Teacher	Student
	ah, I wrote it
you read it?	the title Polish is different
Tell be about it. Can you give me a thumbnail sketch?	
(Grammar-based exercise)	

In addition to inserting responses of negative evidence to utterances within sustained student texts during open discussion activities, or building texts that can then receive responses in grammar-based ones, another possibility would be to employ classroom activities that require precision of form and content and thereby invite responses of negative evidence as a necessity for their completion. Close-ended, information exchange tasks are especially conducive to this outcome. For example, students might be asked to reconstruct a scene from a film or story by pooling individual story lines, in strip story format, which need to be placed in order of occurrence. They

might be asked to participate in a dictogloss task, taking notes on a passage or scene, then using the notes to collaborate in reconstructing them. As other research has shown (See again, Swain 1995) during their collaboration, there is a strong possibility that they will be given responses of negative evidence when they have failed to mark appropriate time inflections and rules.

Because the grammar-based sentence construction activity generated a good deal of negative evidence in response to student imprecisions, but invited little sustained speech on the students' parts, it must also be modified when it is used to promote this important dimension of L2 learning. Making such exercises less teacher-led and more peer collaborative as well as requiring students to justify their answers to each other in small groups and to their class as a whole, might stimulate them to provide responses of negative evidence, observe grammatical imprecisions and inconsistencies, and discuss them metalinguistically. Similarly, setting up activities in which a peer must justify or expand on another student's output might also encourage peer attention to mismatches of form and function and more feedback with negative evidence from peers.

Results of the present study remind us of the important role of activity in generating the kinds of input needed for L2 learning. The two activity types of the study, discussions and grammar exercises, are common to a variety of classrooms, not only those of the current study. Although not always embraced wholeheartedly for their role in assisting L2 learning, they remain common classroom staples. Indeed they have much to offer both learner and teacher with respect to classroom communication, preparation, and management, and with these few suggested enhancements, could be even more beneficial for L2 learning. As meeting students' needs for negative evidence becomes recognized as an important classroom concern, modification of existing materials and adjusting of classroom practice will become increasingly necessary. The findings of the present study, it is hoped, can be of help in that regard.

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